



ALFA
ROMEO

The image features the Alfa Romeo logo in a stylized, white, blocky font against a dark blue background. The logo is composed of two lines of text: "ALFA" on top and "ROMEO" on the bottom. The letters are thick and have a slightly irregular, hand-drawn appearance. A thin, white, curved line arches over the top of the "ALFA" text, and a thin, white, curved line arches under the bottom of the "ROMEO" text, framing the central text. The overall design is minimalist and modern.



Industrial Refrigeration

Claes Ericsson
Industrial Equipment

Industrial Equipment

- the segment and its markets

Comfort



OEM Engine &
Transport

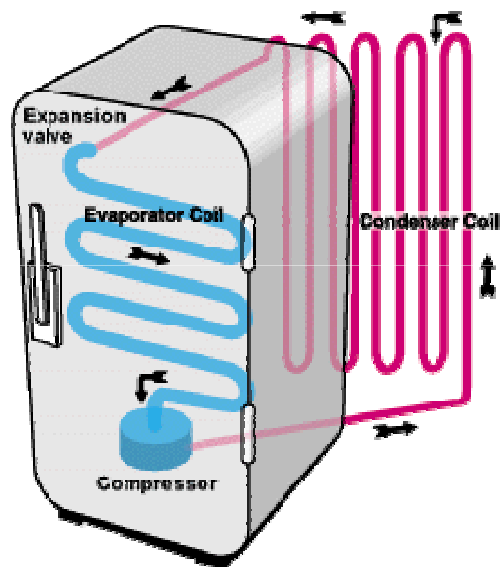
Refrigeration



Fluids & Utility

Refrigeration

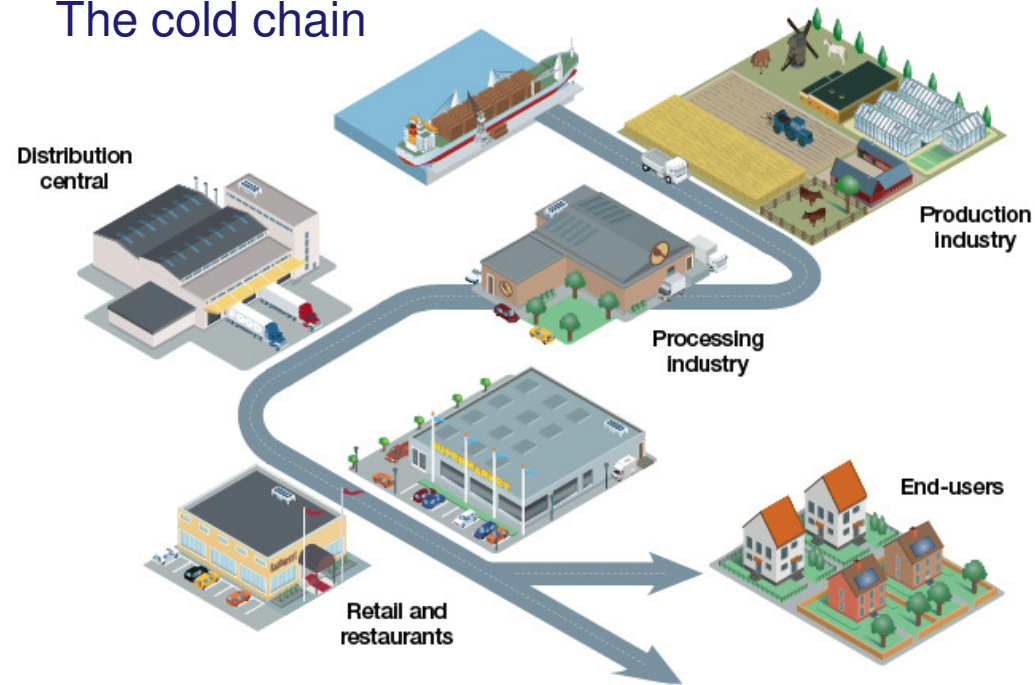
– what is industrial refrigeration?



Industrial refrigeration

– the main end-user markets

The cold chain



HVAC & Refrigeration



Process Industry

Key market drivers

– structural growth drivers trigger change

- * Increased living standards
- * Urbanization
- * Environmental concerns
- * Energy efficiency



Key market drivers

– increased living standards & urbanization



Increased living standards

- * New consumption patterns in BRIC
- * Demand for more prepared food
- * Higher quality of food



Urbanization

- * Strong urbanization ahead
- * Cold chain infrastructure

Living standards & urbanization

– examples in fast-growing economies

* Expansion

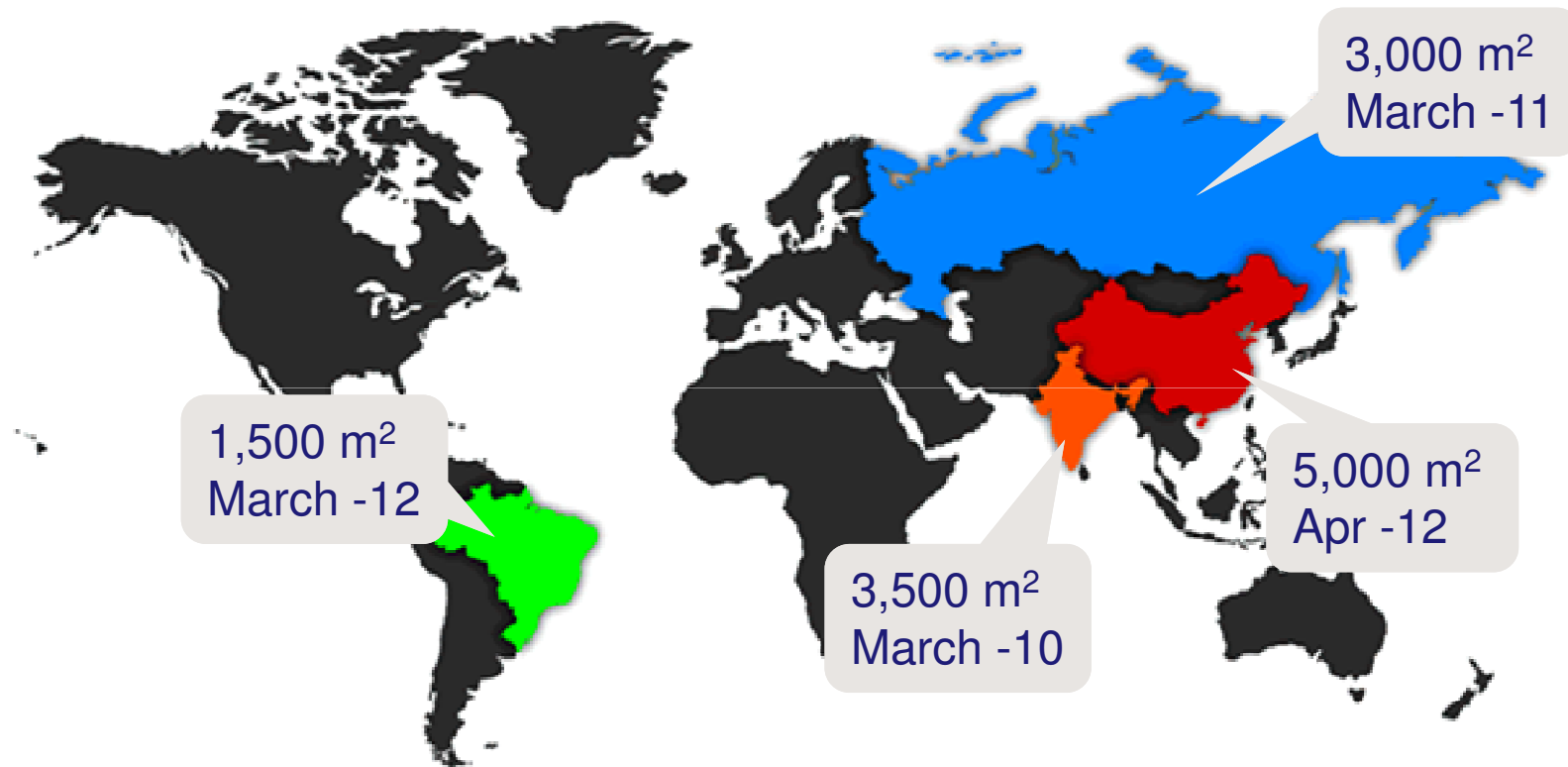
- 1000 hyper or larger supermarkets are added in the BRIC countries every year
- FDI – foreign direct investment – means entrance of global retail players in India
- New state program for food in Russia

* Modernization of installed base

- Old systems are inefficient

Stepwise increases

– in footprint for air products in BRIC



Key market drivers

– environmental concerns

* Montreal Protocol
– Reduction of ozone depleting gases

* Kyoto Protocol
– Reduction of green house gas emissions



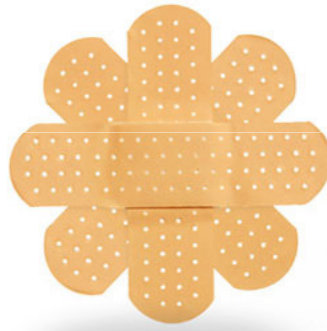
Environmental concerns

– drive increased use of natural refrigerants

Environment



Safety



- Ammonia & CO₂
- Aligned with nature
- Technology barriers
- Risk avoidance

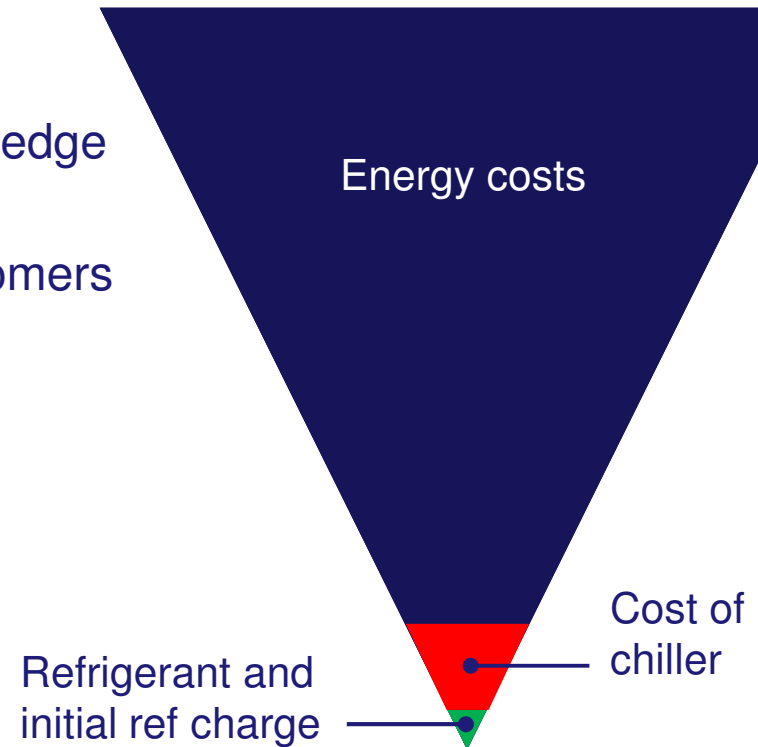
Key market driver

– energy efficiency

- * Cost of energy and energy usage
- * Combining thermal & application knowledge for higher efficiency
- * Alfa Laval is the leader in helping customers cut energy costs.



The Optigo case



Energy efficiency

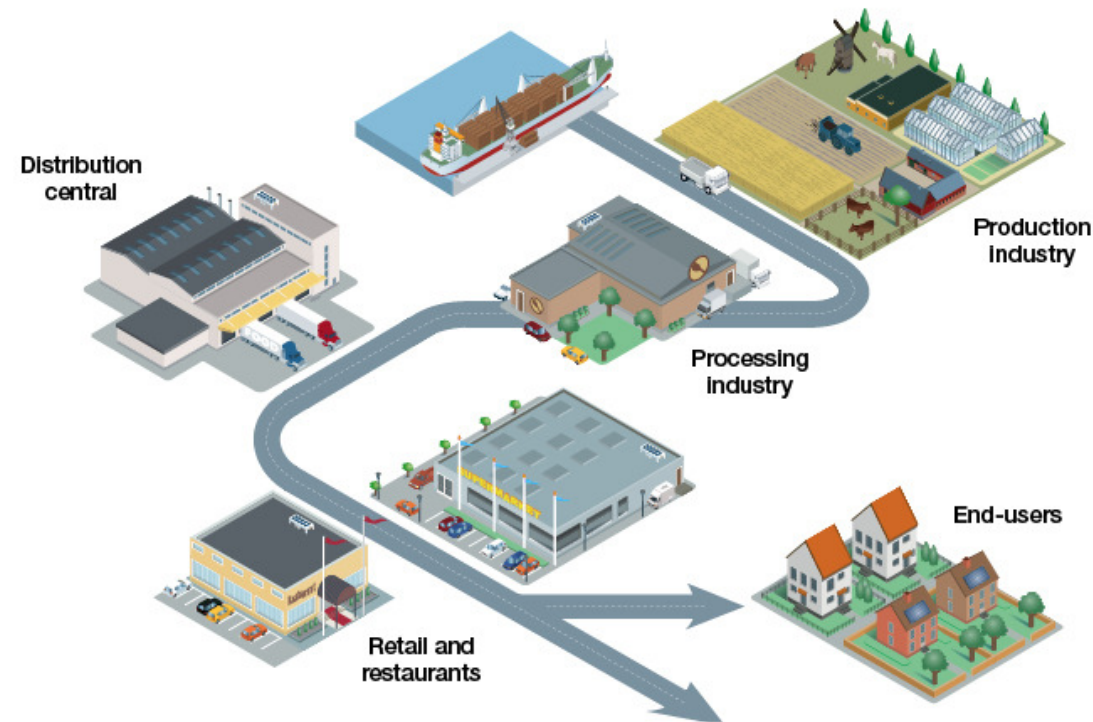
– examples in established economies

- * Retrofit market
- * Energy efficiency and LCC
- * Alignment to legislations



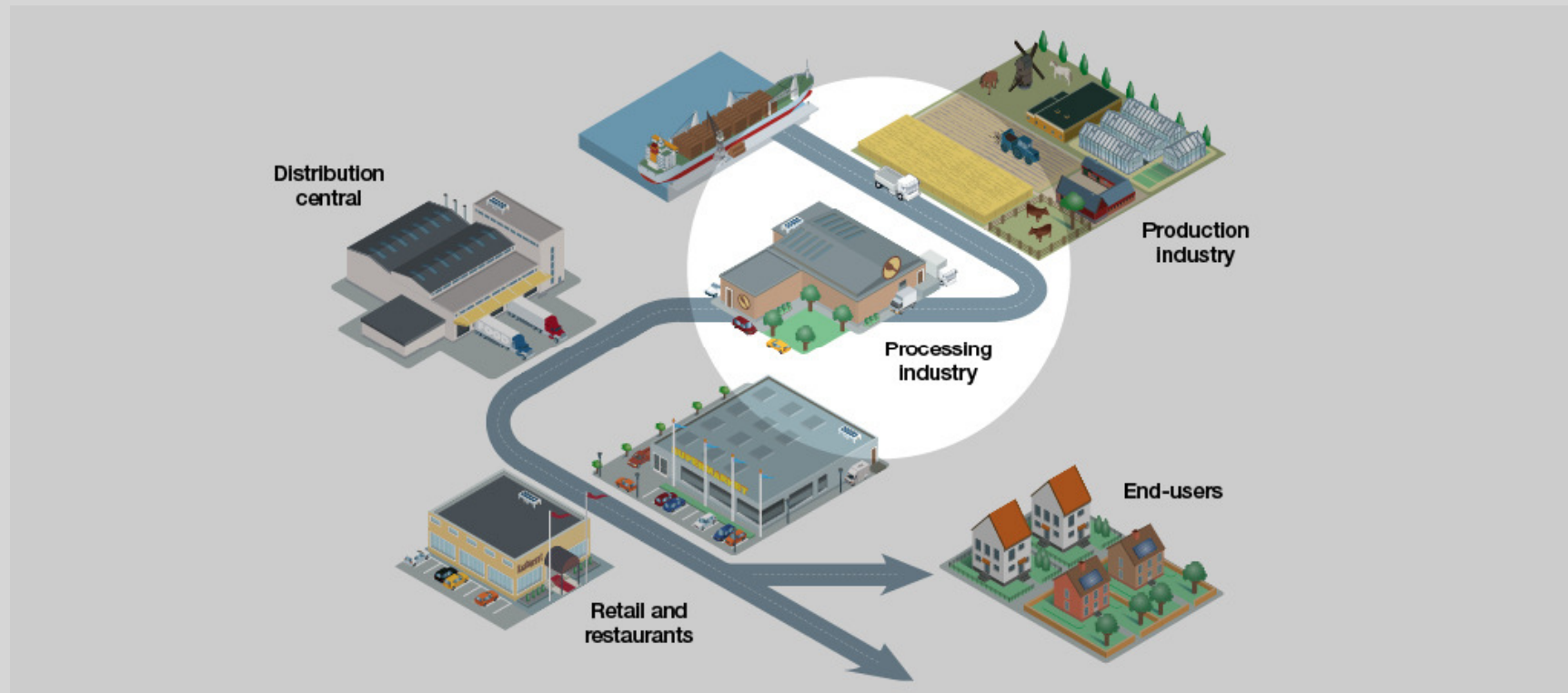
Let's look at practical examples

– the cold chain

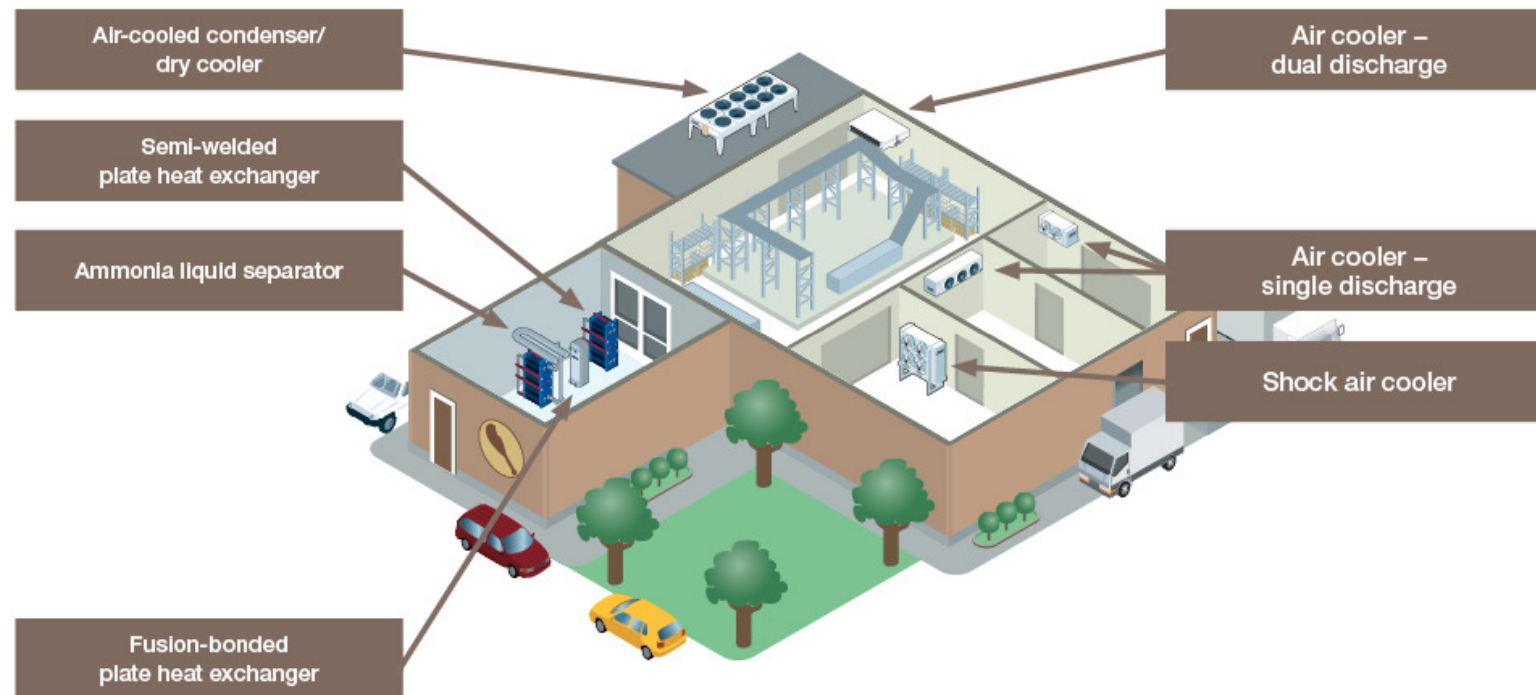


The cold chain

– food and beverage processing industry



Food & Beverage processing industry



Food & Beverage processing industry

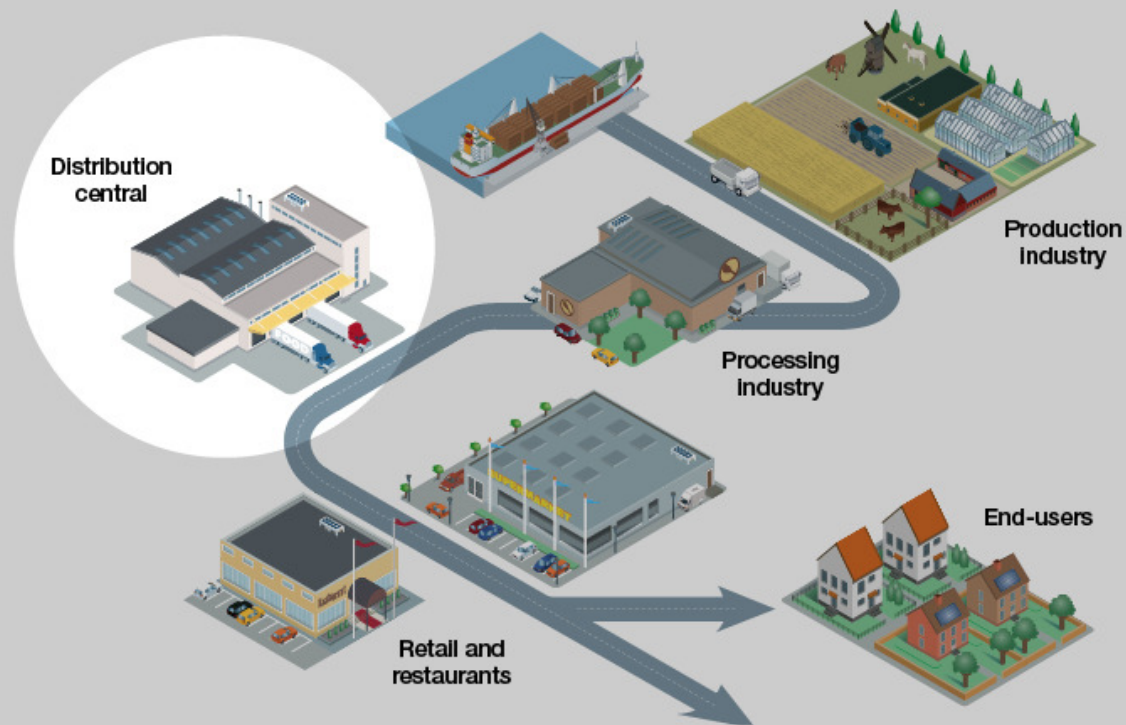
– Beer production in Brazil

- * Ammonia refrigeration system
- * Evaporators & condensers
- * Utility cooling water
- * Order value 1.9 M€

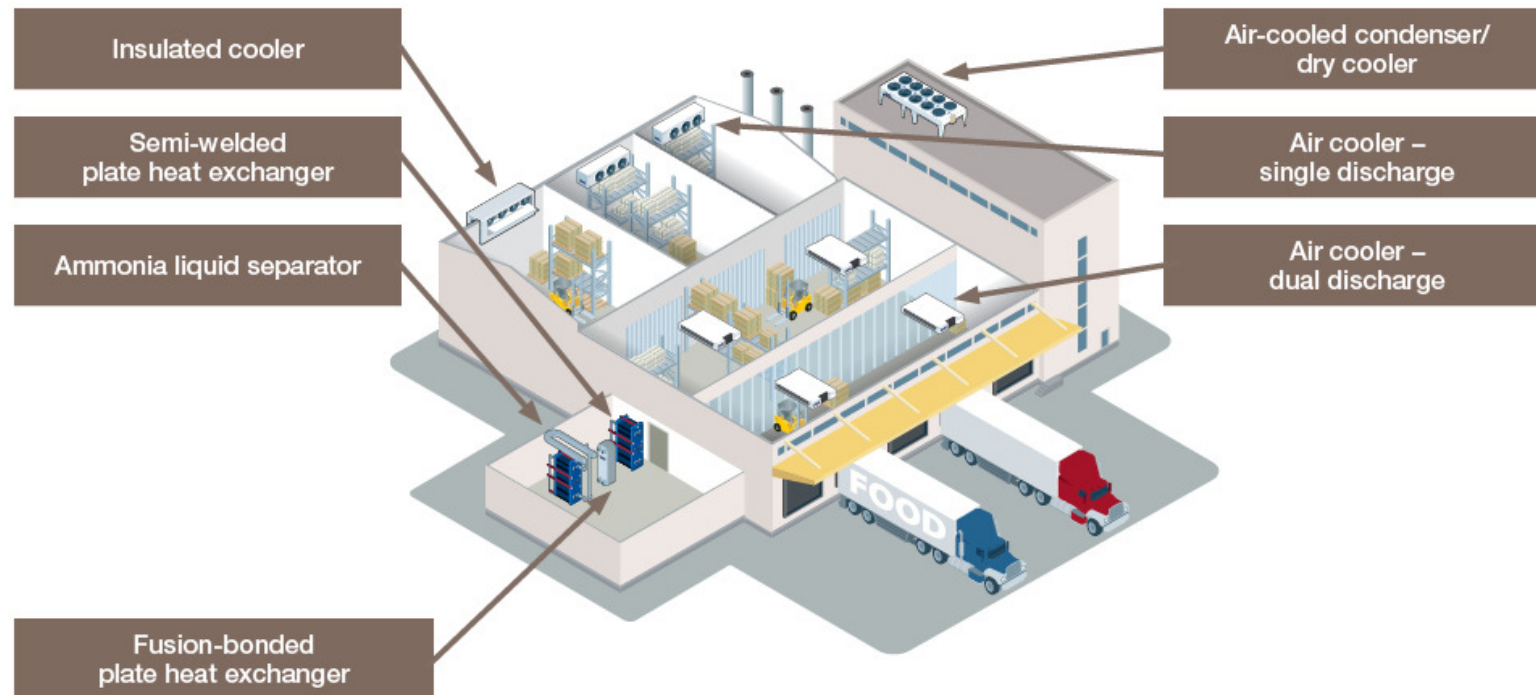


The cold chain

– cold storage and distribution centrals



Storage and distribution central



Storage and distribution

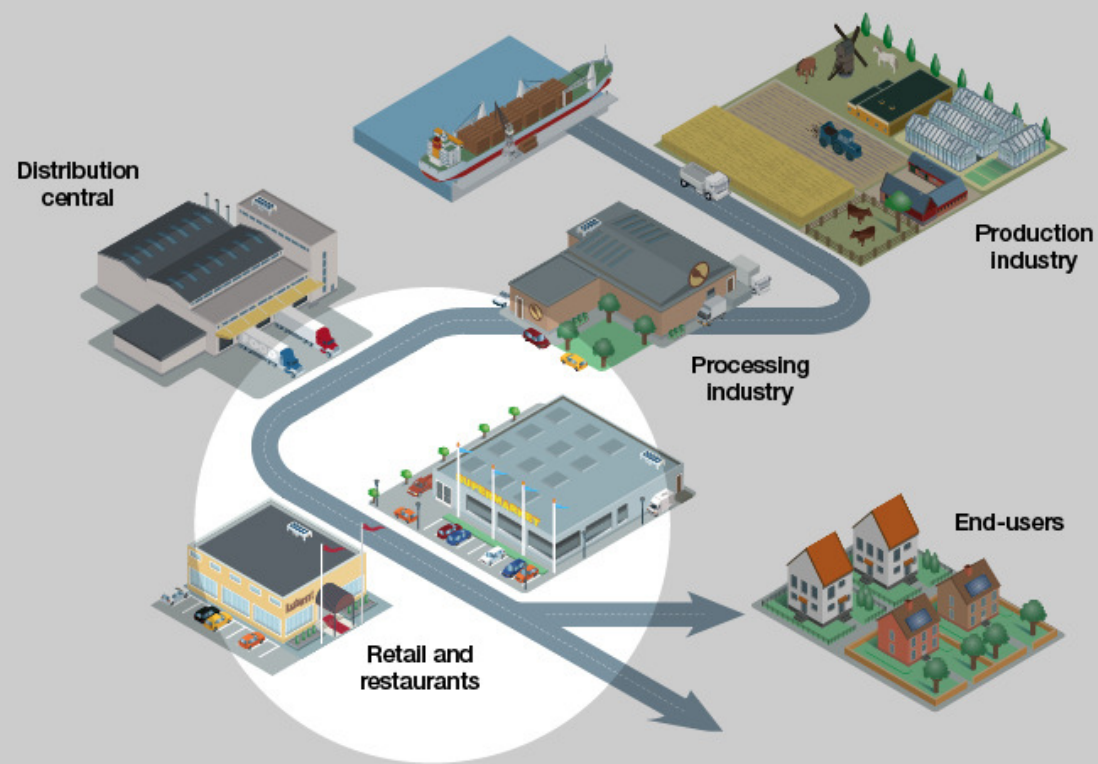
– Chili storage in India



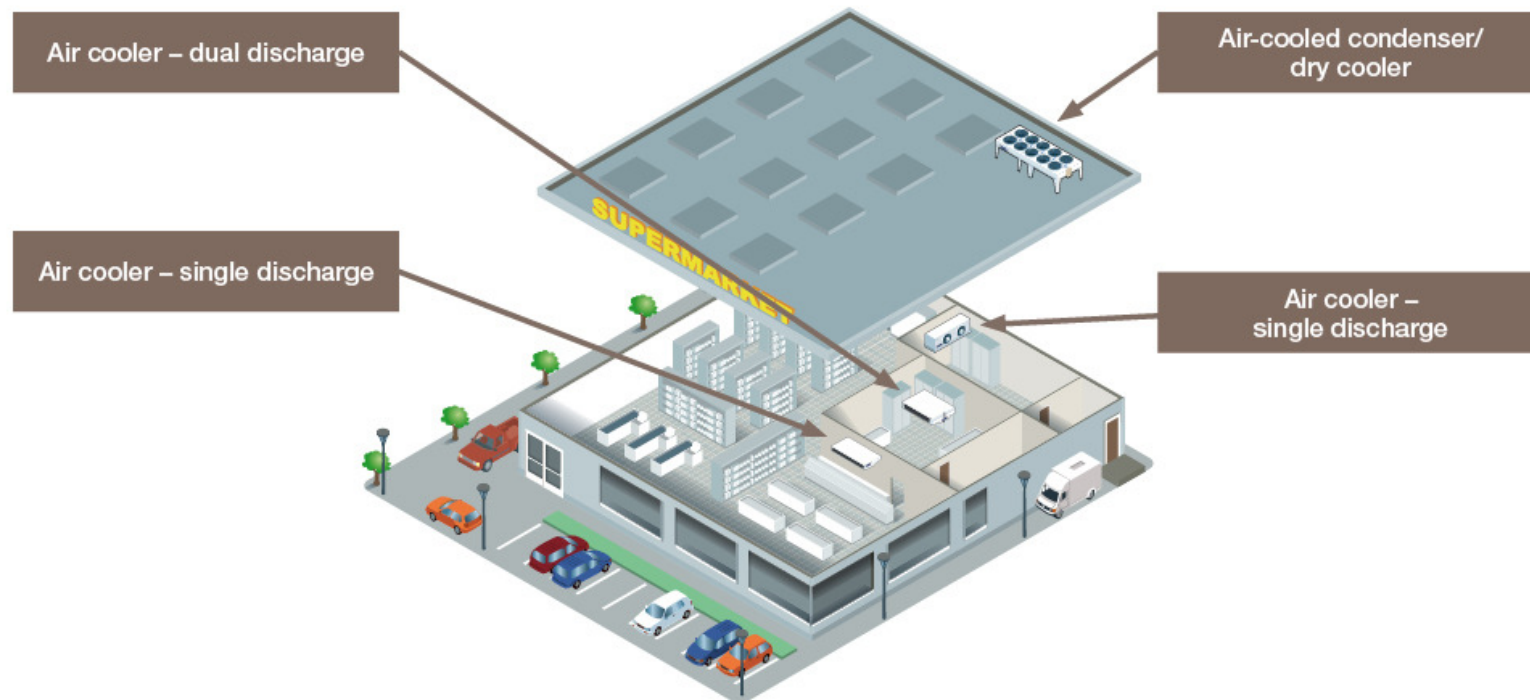
- * India is among the world's largest fruit & vegetables producers
- * According to Indian government
 - 5,500 cold storage areas in India today
 - This capacity cover 15% of production output
- * Cold chain opportunities
 - 25% of food destroyed
 - 20% growth in the cold chain annually

The cold chain

– retail



Retail



Retail

– CO₂ refrigeration in the UK



- * CO2 gas cooling
 - Legislation-driven investment
- * An industry on the move
- * Industry infrastructure to grow
 - Knowledge among installers
 - Time

Summary

- * Structural growth will offer opportunities ahead
- * Our improved footprint enables access to a larger market
- * As technology leader with a focus on R&D, Alfa Laval will also drive change in a very dynamic market
- * A strong brand, wide offering, excellent market coverage and deep application knowledge means potential to capture future growth



ALFA
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The image features a stylized Alfa Romeo logo on a solid blue background. The logo is composed of two horizontal white lines. The top line is a thin, slightly curved line that passes behind the letters. The bottom line is a thicker, straight line that passes behind the letters. The letters 'ALFA' are positioned above the top line, and 'ROMEO' is positioned below the bottom line. The letters are white and have a stylized, blocky appearance. The 'A' in 'ALFA' and 'ROMEO' is unique, with a curved top and a vertical stem. The 'R' in 'ROMEO' has a curved top and a vertical stem. The 'O' in 'ROMEO' is a simple circle. The 'M' in 'ROMEO' has a curved top and a vertical stem. The 'E' in 'ROMEO' has a curved top and a vertical stem. The 'I' in 'ROMEO' is a simple vertical line. The 'O' in 'ROMEO' is a simple circle. The 'M' in 'ROMEO' has a curved top and a vertical stem. The 'E' in 'ROMEO' has a curved top and a vertical stem. The 'I' in 'ROMEO' is a simple vertical line.